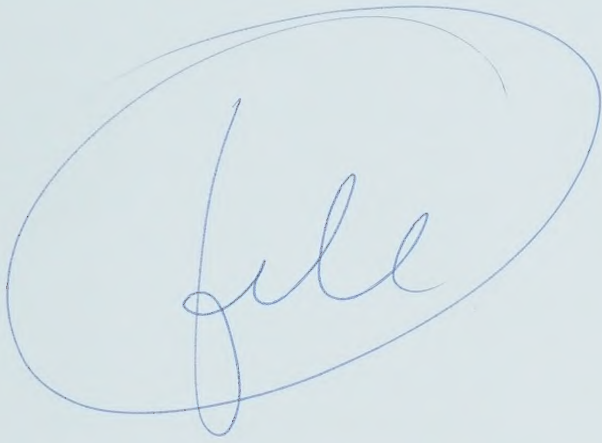


1965



The Pilkington Group of Companies



COVER PICTURE:

This mirror, situated in the canteen block at Head Office, was designed and engraved by the well known artist, John Hutton.

A year ago I said that this year we would as an experiment insert in this Review a separate page for each section of the Firm covering the matters of main interest to that section; this is because while everybody is interested in the progress of the Firm as a whole, they are also interested to have a more detailed report on the activities of that part which they know best. The senior management in almost every section has provided useful detailed information about their own geographical or operating divisions, and I hope the results will prove interesting to all who read them. It has, however, proved more difficult than I had expected to cover the whole field in an interesting way for everyone, and this year, therefore, is only proving a beginning. Twelve sections are being tried—Sheet Works, Cowley Hill and City Road, Doncaster, Australia, South Africa, Canada, the Argentine, New Zealand, Ravenhead, Fibreglass, C—P.O.W., Chance Brothers.

Others, for instance Queenborough and Pontypool and India, will be attempted more thoroughly next year. All Triplex

1965

Pilkington Group glass is a feature of London's 580 ft. high GPO tower—the tallest building in Britain. 20,000 ft. of Antisun glass and 60 Insulight double glazing units were used, while the restaurant is triple glazed with 48 Insulight units (1 Armourplate and 2 Float). Fibreglass Resin bonded slabs provide the insulation for the curtain walls and Fibreglass Rigid Sections are used in the heating services.

employees have already had a full report contained in its chairman's speech. The Research Department and Head Office are two important sections that it is not easy to treat in exactly the same way as the Works or geographical areas. I hope, however, that we shall learn how these experimental pages are regarded by those who have seen them in order to help us next year to cover a wider area than this.

To those who have received their own insert I say that the general background is that during the past year we have not done well enough, and if any section gets the feeling that they themselves have had a satisfactory and prosperous year they still will, I hope, feel that they have got to do even better in future years, in the interests of the Firm as a whole.

In every single part of the Firm there is still considerable room for improvement that is within our own power to achieve, quite apart from the impact of external conditions over which we can have but little control. In every part a competitive attitude is needed.

A year ago I expressed some caution about the 1965 results, but not enough. The results for 1964 were good, but this year's ought to have been better because we have more productive plant in use, more capital invested, capital that is being slow to earn a proper return.

Sales for 1965 over the whole of the Firm will have been very close to those of the previous year. Profits are sharply down. The external outlook in Britain and most other countries is not good. All the more reason, therefore, why internally we should leave no stone unturned to do better in the years 1966, 1967, and those immediately following; it is not enough to be making sure that in the year 2000 we will be competitive—it is now that matters too.

Taking the external position first, in this country a sharp dose of deflationary medicine imposed by the Government has hit us, in common with many other companies and industries, but we have had an exceptional impact, particularly in Flat glass. Two of the industries whose further prospects are affected are the building industry and the motor industry, and we are one of the few industries that depend on these two industries so much; but an additional factor is that in the glass trade throughout 1964 the world demand was exceptionally and unreasonably high; this excessive demand led to heavy stocking on the part of most of our biggest customers, who have spent much of 1965 in using up their stocks and therefore have not been buying enough to keep pace with their actual consumption. This picture should change in the course of 1966. But the deflationary action taken by our Government in Britain has been paralleled by similar action to keep inflation under control in a number of other countries of great importance to us, and the story of a slowing down in the rising level of demand is almost universal. I say "almost" because in the United States, and to some extent in Canada, pro-

and the prospects for 1966

Sir Harry Pilkington

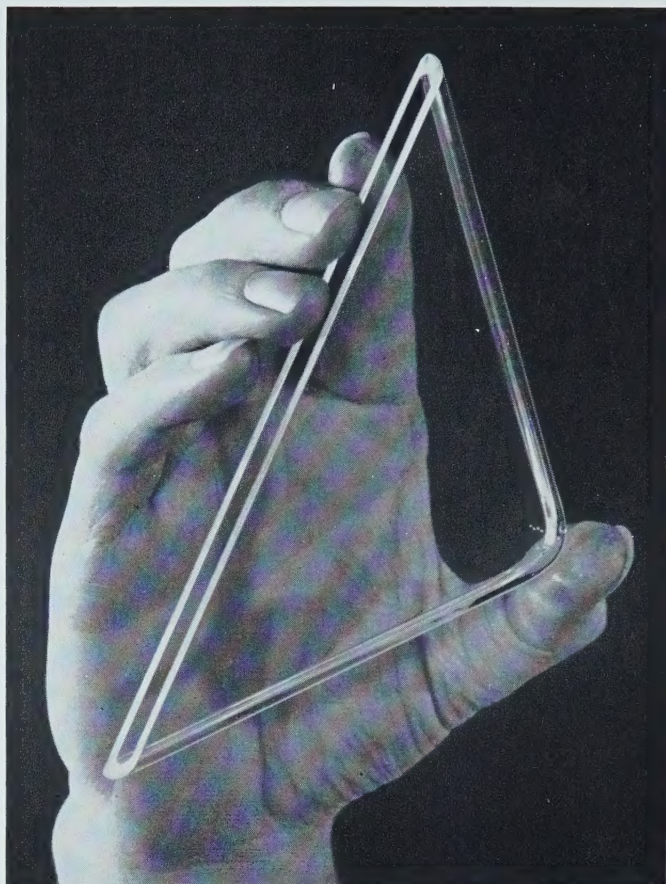
gress and prosperity have continued unchecked. In most countries, moreover—again particularly in Britain—the reduction in the inflationary pressure has not, unfortunately, resulted in the expected reduction in the rate at which costs have been rising. Wages and salaries in our industry will never rise at a very different rate from

those in the economy as a whole. Speaking very broadly, if one year we go a bit too fast the next year we will probably get back into the normal phasing again. Wages and salaries in the different industries in this country are bound to keep to some extent in step. In our case, costs have risen partly as a result of direct wages increase, and partly as a result of the reduction in the normal working week; the total impact on our cost of production in every Works is very substantial.

Prices, on the other hand, have become more and more difficult to increase, partly due to foreign competition and partly to the pressure so rightly placed by the Government to try and keep all prices, wages and incomes in check. Prices, it appears, are more responsive to control than costs.

This gives me a chance to refer to some of the advances made in working conditions during the year. During 1965 the length of the working week of our hourly-paid employees at all Works in the U.K. was reduced to 40 hours. We were told that no other glass manufacturers in the world had succeeded in applying a genuine 40-hour week to its continuous shift workers but, with the co-operation of those concerned—the men, the unions, and the management—this problem was solved satisfactorily in our organisation. The Sickness and Industrial Injury Benefit Scheme for Hourly Paid Employees in the U.K. was revised during 1965 so that the benefits payable under it are now related to the employee's normal hourly rate. The service required to qualify for benefits and the waiting periods before benefits are payable were all reduced. As has happened before legislation in the U.K. caught up with one of our benefits, namely the Redundancy Schemes for salaried and hourly paid employees, which were first introduced in 1960. The Redundancy Payments Act 1965 came into operation on 6th December, 1965, and from that date the Company's own schemes were withdrawn.

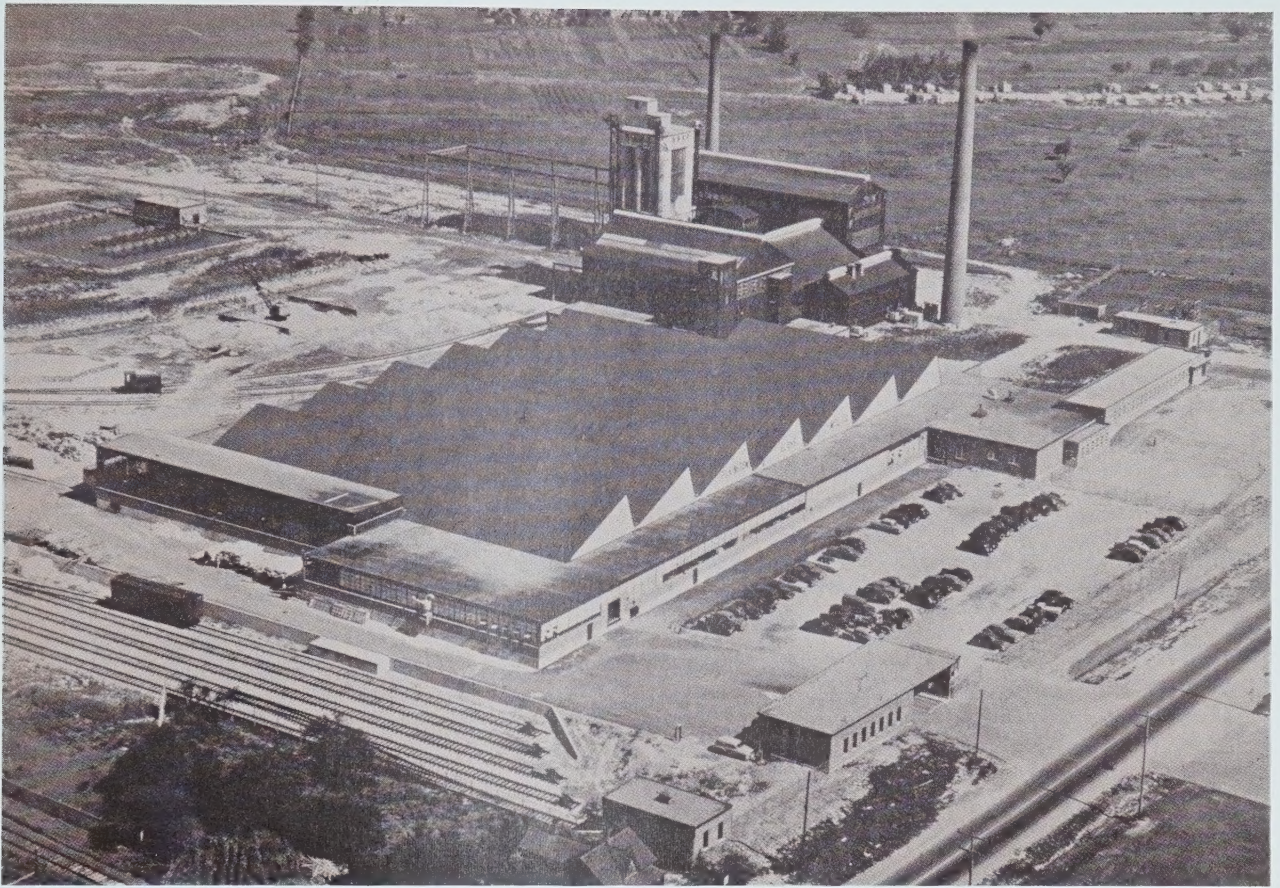
To return to the subject of costs and prices, it has been said before, but is worth repeating, that our industry is a continuous process industry with very large units of production, and therefore is particularly sensitive to changes in the level of demand. The cost of manufacture of the last few million square feet is much less than the average cost of manufacture of the whole output of a tank. Unfortunately, there is no possibility of selling these last few million feet at a special price in particular markets, as this is exactly what every other manufacturer would like to do, and the result of constantly reducing prices to sell on what is technically known as "marginal costing", is simply to bring the whole level of all prices rapidly down. Only those countries who have an absolutely secure, protected, home market, where they can sell the larger part of their output at very satisfactory prices without fear of retaliation or competition from abroad can safely go in for what is known as "dumping"—that is to say selling the surplus overseas at the highest price that they can get but not minding if it is as little as half the average price that they get in their home market. This is the kind of competition from which we suffer—it can usually be undertaken only by the small or the very highly protected, such as those in totalitarian countries where the possibility of competition is ex-



"Insulight" Glastoglas, produced at City Road Works, is the first all glass double glazing unit to be manufactured in Britain.

cluded. It would be a fatal policy for a country like Britain to adopt it since the whole standard of living depends on the level of profitable international trade, on balancing payments.

There is no substitute for offering better value for money than anybody else can; value for money is a compound of price, of quality, and of service. Price is affected by cost. If, as at present we fear, our costs are higher than those in some other countries for a good many kinds of glass, then we still have to sell at the same price as others and absorb the difference by accepting little if any profit, unless we can make up by better service, better delivery, and more reliable quality for the difference in cost and in price. This sounds easy, but in most kinds of glass there are a great many manufacturers now who can make a perfectly adequate quality for most uses. Quality in ordinary window glass, for instance, is seldom an issue; quality, on the other hand, in double-glazed units, is very much an issue; quality for silvering for mirrors is very much an issue. But it so happens that mirrors and double-glazed units are two of our products where delivery and service has, on the whole, been least satisfactory and is the most difficult to provide. These are examples of where the good that can be gained by being able to offer a good quality can be more than undone by unreliability in service. Ever



Aerial view of the Scarborough factory in Ontario, Canada where the most up-to-date Float plant in the world is to be built to come into operation in 1967.

since the War service has been a troublesome question, and this is because we have consistently operated too close to capacity, either of plant or of labour, to be able to turn the tap on quickly in order to meet unexpected sudden demands. Other people are better at this than we are—they shouldn't be. This should be one of the benefits that we should get from increased mechanisation, from having capacity normally in reserve, from good planning and from budgeting to operate at a level of capacity that allows for emergencies. With very full employment in this country, and in most others where we are concerned, there is not any reserve of labour to cope with this turning on of the tap, except within the existing labour force—in other words, with overtime. Overtime should not be a regular feature of employment, it should be the flexible weapon with which we can step up output and despatches suddenly to meet these exceptional needs and to avoid losing a reputation for service. Our overseas competitors seem to be more flexible than we are and do not seem to get the same reputation for being unable to increase deliveries suddenly to meet demand. But, of course, the main drive that we have got to make is not so much on delivery, not so much on quality, as on cost. Despite rising wages, cost of materials, cost of transport, cost of packages, we can only maintain our position in the world from whatever factory anywhere in

the world we are supplying, if we can get our costs down; if we can get our productivity up.

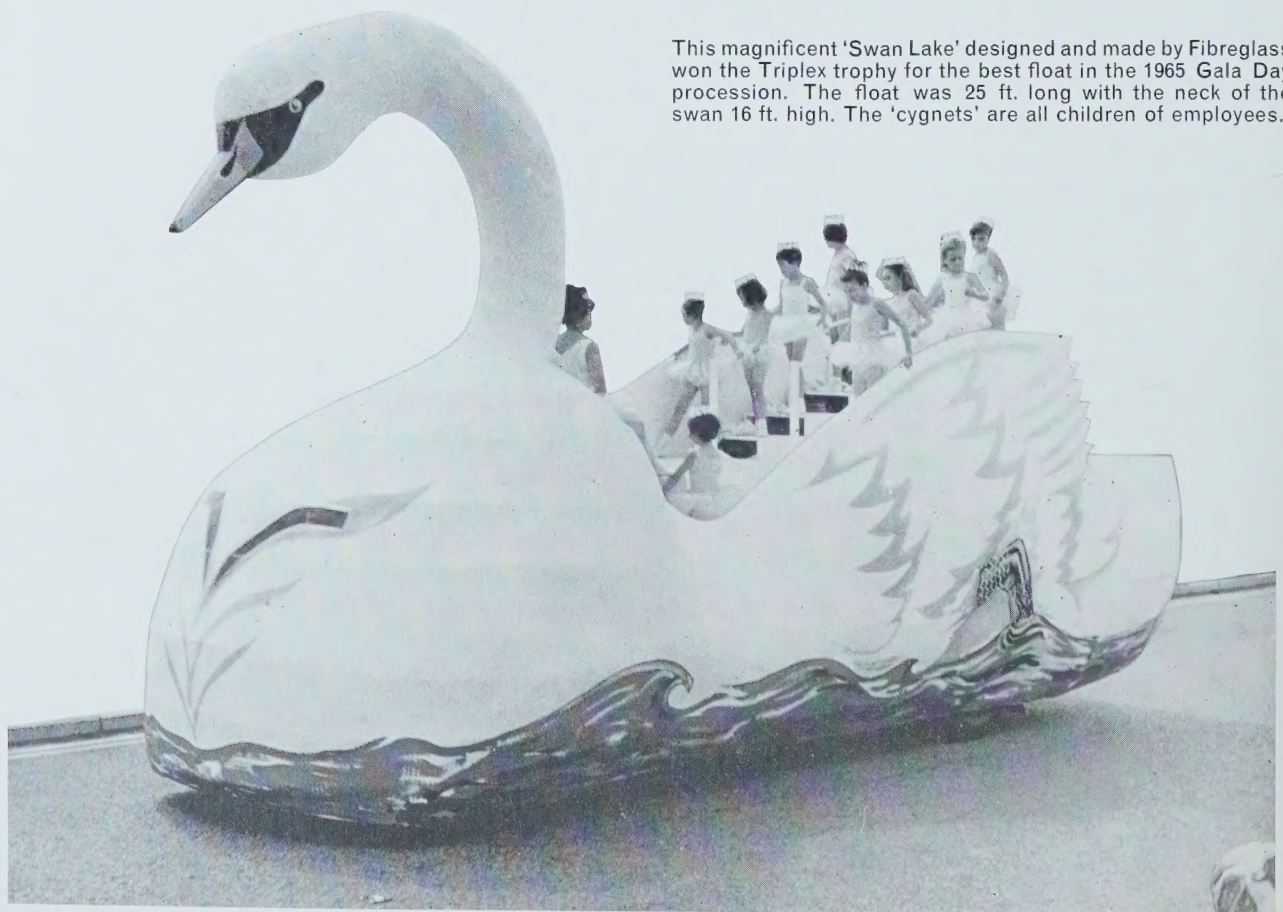
And here, I am bound to say, the picture is mixed. There are in many parts of the Company real signs of progress. For instance, the output from tanks has certainly gone up by increasing speeds made possible by intensive technical development. Cowley Hill's ten-year plan of rebuilding and its installation of automatic warehousing has as its real justification that with a modern warehouse our costs five years from now will be lower than they are today, even if costs go on rising, and that therefore we will be better equipped to hold our own; but every other manufacturer of standing in the world is adopting a similar approach. We have to do all this, and more, to stay where we are. It is the extra little bit beyond that that will improve our position so that instead of staying where we are we can regain ground that we have lost or make further advances on existing gains.

Now I want to turn to some of the tools that we can use to achieve all this. Within this Firm—as with most others nowadays—great emphasis is laid on accurate budgeting. We budget and we are not accurate, and sometimes our budgets get mixed up with targets so that people distrust them from the start. Budgeting is not done only at the top, the effect of budgeting starts

a very long way down, both on the sales and on the production and administrative sides. Production, costs, sales, prices, profits, all have to be budgeted in the greatest detail, and these budgets should, by now, be reasonably accurate because we have had enough experience to know what allowances we should make. Our results in most years have failed to come up to budget; in most cases there has been too big an element of optimism about the future, too little realisation that even if last year's exceptional trouble does not arise again there will be a different exceptional trouble somewhere to be expected in the current year. But budgets are a useful tool of management, including manpower budgets, and we are going to pay more and more attention to the achievement of budgets, and to the placing of responsibility for their achievement on those who make them; in fact this Firm has got to become more cost conscious and more profit conscious. Much is now being done to provide better and speedier basic information for management so that departures from what has been expected may be much more quickly identified and corrected.

During the past year we have tried another important experiment, we have had an investigation of a whole section of our activities by outside consultants. The

section chosen was one that was not doing well enough—Canada. We had a report that was full of suggestions for better organisation and better deployment of all our resources there; we have adopted the report and we are expecting striking results within a very few years. This is a further tool that we shall use in other parts of the Firm. The introduction of business consultants is frequently taken as a sign that things are wrong and may cause alarm or despondency among the staff. It is a fact that we chose a place that was not doing well for our first attempt—there will be others, and they may not be chosen because they are doing badly but sometimes because by all appearances they are doing well—there may be lessons in that section that can be applied to other sections. We shall almost certainly choose, within the next year or two, sections that are either incapable of actual profit assessment, or sections that are doing well, in order to see whether there is any economy that can be introduced there—any improvement. The experience of other industries is that sometimes businesses that are earning easy profits are the least efficient because there has been the least pressure to get rid of inefficiencies and waste. I therefore want all employees to realise that if they find that the particular section in which they are most interested is going to be



This magnificent 'Swan Lake' designed and made by Fibreglass won the Triplex trophy for the best float in the 1965 Gala Day procession. The float was 25 ft. long with the neck of the swan 16 ft. high. The 'cygnets' are all children of employees.

subject to external assessment and review by business consultants, they should not regard it with alarm or believe that this section is in need of special attention. I hope that in the course of years every part of the Firm will have come under this form of periodical review and external assessment.

I am now going to give some broad figures about the Firm in 1965. As you may know, in recent years we have begun to file our accounts with the Board of Trade, and in this way they become available to the public and to the press. So about this time each year you are apt to see extracts from our figures in the newspapers. The figures sometimes require more explanation than they get and, even if correctly given, can have a misleading slant, but in what follows I am using terms like sales and profits as they would be in any other company.

Financial figures cover the accounting year from March to March, so that the latest figures in the papers tend to be nine months out of date. It is not very easy to give an exact position part way through a year, but I shall do my best to give realistic estimates, based on calendar years. Obviously it is impossible to give the figures for the year ending March 1966 when this report is first dictated at the end of December 1965; for that reason all the figures that I give are necessarily fairly approximate. In round

terms, our total sales of the Parent Company and all Companies of which it is more than 50% owner, for the last four years will have been as follows; including throughout for this purpose Triplex who only formally became a subsidiary during the last twelve months: 1962, £65 million; 1963, £70 million; 1964, £80 million; 1965, £80 million. Very roughly, total trading profits before tax for 1964 were about £10 million, and for 1965 will probably not have been more than about £8 million. Tax takes more than half these sums. As to Capital Expenditure, the Company and its subsidiaries have been spending, in one way or another, at least £10 million a year lately, that is to say rather more than the proceeds of retained profits and of depreciation. Anyone in almost any part of the world can see that we have been spending; anyone in any part of the world receives "Cullet News" and will read of some of the many examples. £10 million is a great deal of money, but unless we can continue spending at this rate, and perhaps even more, we shall find that instead of gaining ground on our competitors, as we would like, we would be losing it, and if we once started to lose ground this would certainly entail a loss of security and would ultimately affect the continued livelihood and the continued standard of living of all our employees wherever they may be.

The new extension to the Pensioners' Pavilion at Ruskin Drive was opened on May 10.



I will touch later on some of the ways we are spending; but first a word or two about Float. Float glass remains the biggest single factor. We are investing in Canada and in Mexico because of it; we have licensed other manufacturers to make and to sell in competition with us and we receive payments from them, payments that will increase. But it must never be forgotten by anyone that our main business is not licensing, is not investing in partnership with others, but manufacturing and selling ourselves. This is the most important thing for Float—that we should make it better and make it cheaper than others, that we should increase its use, and that we should gain our full share of any such increased use, that we should enhance our reputation, and that we should make profits from Float that will let the Firm develop its range of activities and its range of social services too, wherever opportunity offers.

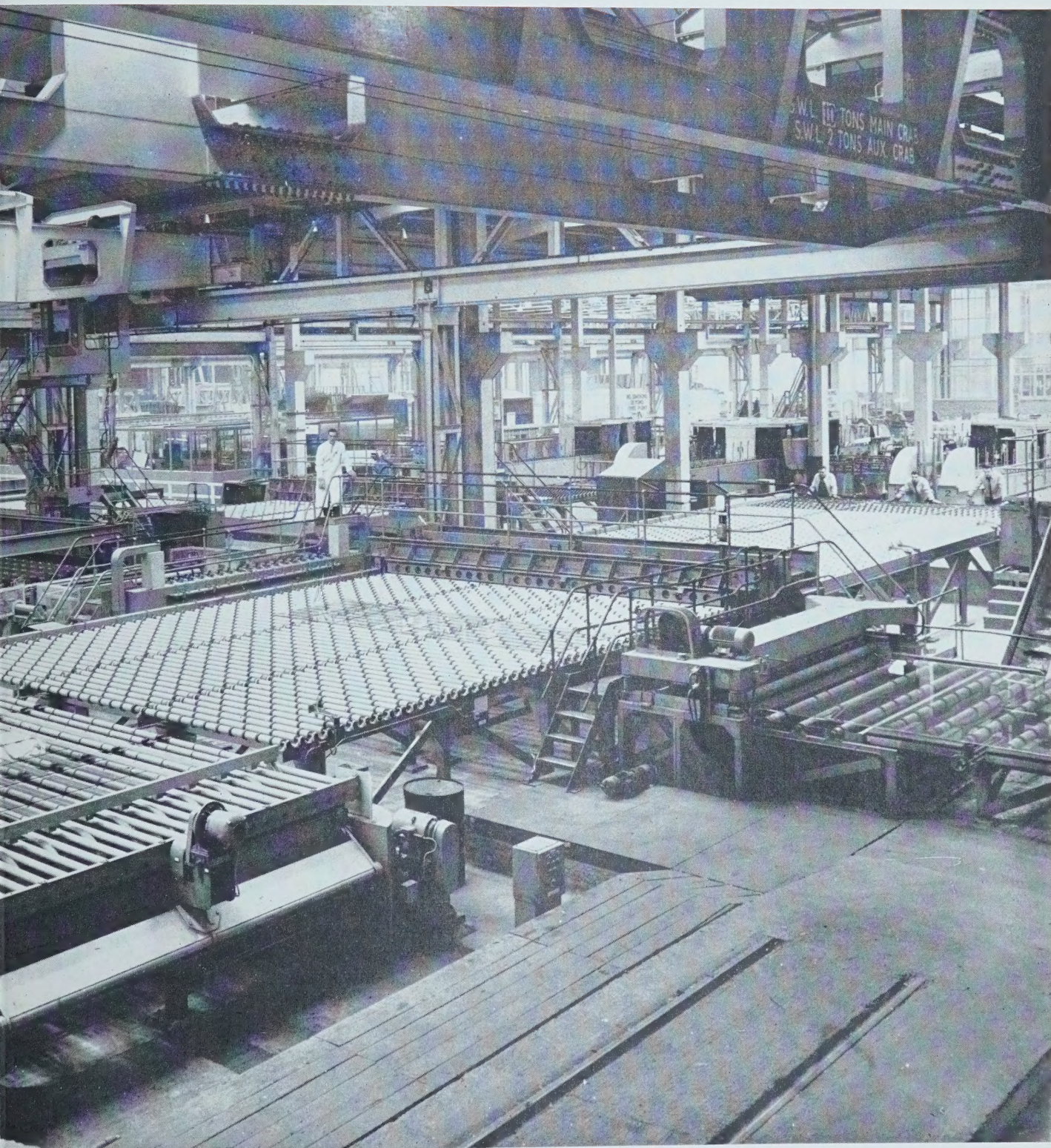
In 1965 manufacturing and sales results from Float have not been uniformly good. Progress has been made but Float has still a long way to go before we can sit back and see the tanks effortlessly pouring out all the glass when we want it, regularly and reliably, of uniform quality, and enabling us to give the service that brings the orders. Exploiting the Float process through manufacture and sales is the top objective.

On the last day of 1965 we applied for a new honour—The Queen's Award to Industry—and our application is for technological innovation, that is to say the development of the Float process. This is a new award, and whether we shall be successful in the very first year of its existence we shall not know before the end of April. During the year we have put in hand two main overseas projects. One is the acquisition of a substantial holding in the Mexican glass manufacturing industry, and the other is to build a large Float glass plant in Canada. For Canada we are borrowing almost all the money in New York; the total cost of this project will be in the order of £10 million, and this money has to be repaid out of profits to be made in Canada over a moderate period of years. This is our biggest single venture of faith since the momentous days ten years ago when we were committing ourselves irrevocably to the manufacture of Float glass. We could have wished to postpone the Canadian venture a further year or two, but external developments in relationships between the Canadian and American Governments have made it essential that we should be in a position to supply Float glass of good quality to the Canadian Motor Industry for the 1968 season, and therefore we had no time to lose.

As regards Mexico, there too there is going to be a Float glass plant, but this is not going to be a complete one. Here Float glass is going to be made out of the same tank as Sheet glass, and a new tank is now being constructed at Mexico City under our supervision. The Mexican market itself is a growing market and we would expect that our Mexican colleagues who control the Company would be able to dispose of most of the output from their two factories in that country within Mexico, with perhaps a certain amount to their immediate

The Automatic Warehouse at Cowley Hill Works.





neighbours in Central America. For this investment we have paid in cash from here, with the consent of the Exchange Control authorities.

It will be seen that these two main investments are both primarily connected with the exploitation of the Float glass process; we must expect this to be the continuing major opportunity that lies ahead of us, and it is an indication of the truth that applies throughout industry now that most investment will stem from technological leadership, which alone gives one the opportunity to enter new markets with a real advantage over other potential competitors.

Despite the great increase in our standing overseas since the war, it is not our deliberate policy to invest there unless there are very good reasons. In fact during the year the British Government has changed the taxation structure in a way that is relatively unfavourable to capital expenditure outside this country; this, as we can understand, is intended to help the balance of payments. Most of our overseas investment has brought substantially more foreign exchange to this country than we would have got if we had not invested. This has applied particularly to our many Safety glass ventures which for long relied largely on glass supplied from Britain, and have, therefore, formed a large part of our exports.

Because of the special inserts I am not going into much detail about how the separate parts of the Firm have been faring. Briefly, however the Optical Division centred on St. Asaph has continued to make steady progress; output, sales, exports and profits all continuing to rise. This Works, within ten years, has achieved a position of real leadership in the optical industry of the world and is taking steady and enterprising steps to exploit its position.

Fibreglass suffered fully from the setback in the demands on the building industry and has had really rather a poor year, until the last two or three months when things have suddenly looked up. The wool section remains the backbone of the business, but additional prospects for the future lie in the development of resin-Fibreglass laminates and a lot of pioneering work is going on in this area. As regards the textile field, we have had manufacturing troubles for too long, but these are now being overcome and the prospect is better. Steps have been taken to secure outlets for the textile products, and we, with a midlands firm—Jones Stroud & Company—have acquired a Company in the electrical industry—Mica and Micanite—and have put some additional money in a Textile Company—Fothergill & Harvey—thereby establishing a better position in this branch of the industry, one that is very competitive. The Fibreglass Works in India is in production, but it is too early to judge of its success.

In the Pressed Glass Division conditions have not been as good as last year; the High Voltage Insulator demand from the Central Electricity Generating Board did not come up to their expectations, as put to us forcibly only a year or so before, and profits have, therefore, been much reduced. From the Head Office windows it is easy to see enormous stocks of High Voltage Insulators, just on the other side of the Lake. The television trade has

had a fairly disappointing year, the demand in the United Kingdom having failed to respond to the introduction of the second BBC Service, as had been expected, and therefore the demand on us for glass has not been as high as we had hoped. Competition in all these fields remains fierce, both for us and for our customers, who are constantly pressing us for lower prices, while we are constantly in need of higher ones.

In Flat glass in the United Kingdom sales have been fair, the main development having been a change to Float from Thick Sheet for the motor trade. This has helped to keep Float busier than would otherwise have been and has, to some extent, concealed the disappointing overall demand for Float or Plate glass for the building and other trades—this we believe to be temporary. The Sheet glass demand has not varied much apart from the loss of the Motor Trade orders. On the other hand, overseas orders have almost universally been disappointing. The only consolation—and it is no satisfaction—that we can have, is that our competitors, from what we know, seem to have felt this setback in demand at least as much as we have. In Rolled and Wired glass, the demand has been disappointing, the use appearing to have declined, but Figured Rolled has remained good.

In the newer products development is steady, but much too slow. Profilit, "Insulight" Double-glazing, Glastoglas—all these potentially important products are proving slow to get well-established, either in the British market or overseas.

Triplex, supplying the motor trade, has also had a much more difficult year than in its year to June 1964, when it had very high and record profits and sales. Triplex seems to have felt the impact of the decline in the motor industry more than might have been expected. Since Triplex Holdings Limited is a Public Company it would be wrong of me to forecast beyond the Triplex Chairman's own statement, at the time when he issues it, what the future may hold.

Overseas, fortunes have been mixed. The Sheet glass factories were all very busy at the beginning of the year, many of them even sending glass to England to help us out. They are not now so busy, and it is certain that few of them will have had as good a year this year as last. The Argentine remains somewhat unsettled politically and financially and has had to devalue its currency three or four times during the last twelve months. Perhaps one of the small bright spots to which attention can be directed is New Zealand, where Sheet manufacture has made a much better start than seemed likely, and has already started making a small profit—this is encouraging and reflects great credit on those who have been responsible. As to Safety glass, there is a story from almost all over the world of a decline in the motor trade activity, believed to be temporary, and of more intense competition; South America has been particularly difficult.

Political changes in Rhodesia are something from which we cannot remain isolated. Naturally our Works at Umtali depends entirely on supplying glass to the motor body assemblers in that country. The prospects for the next few months in this connection must be very poor.

Up till now Umtali has been a small Works doing well. We feel great sympathy for our colleagues of all races in that country, who are placed in this fantastic and difficult situation.

I have mentioned Canada twice briefly already. The consultants' report and the consequent changes, culminating in the appointment of a new president to head up all our Canadian operations, has called for special qualities of understanding. In most difficult circumstances Canada has had at best a moderate trading year, but with a new spirit of confidence and independence and full backing from England it is now on the threshold of a quite different future.

Three other important matters I must mention are on the British domestic front, and all originate from Government action. The first was the new structure of taxation, which gives a greater inducement to retain profits in business for future investment; as this is something we have always done it would not affect us much, while on the other hand we are now given a yardstick for dividend

distributions that may mean we should pay out more. Tax changes mean much more to a company and its activities than are sometimes recognised.

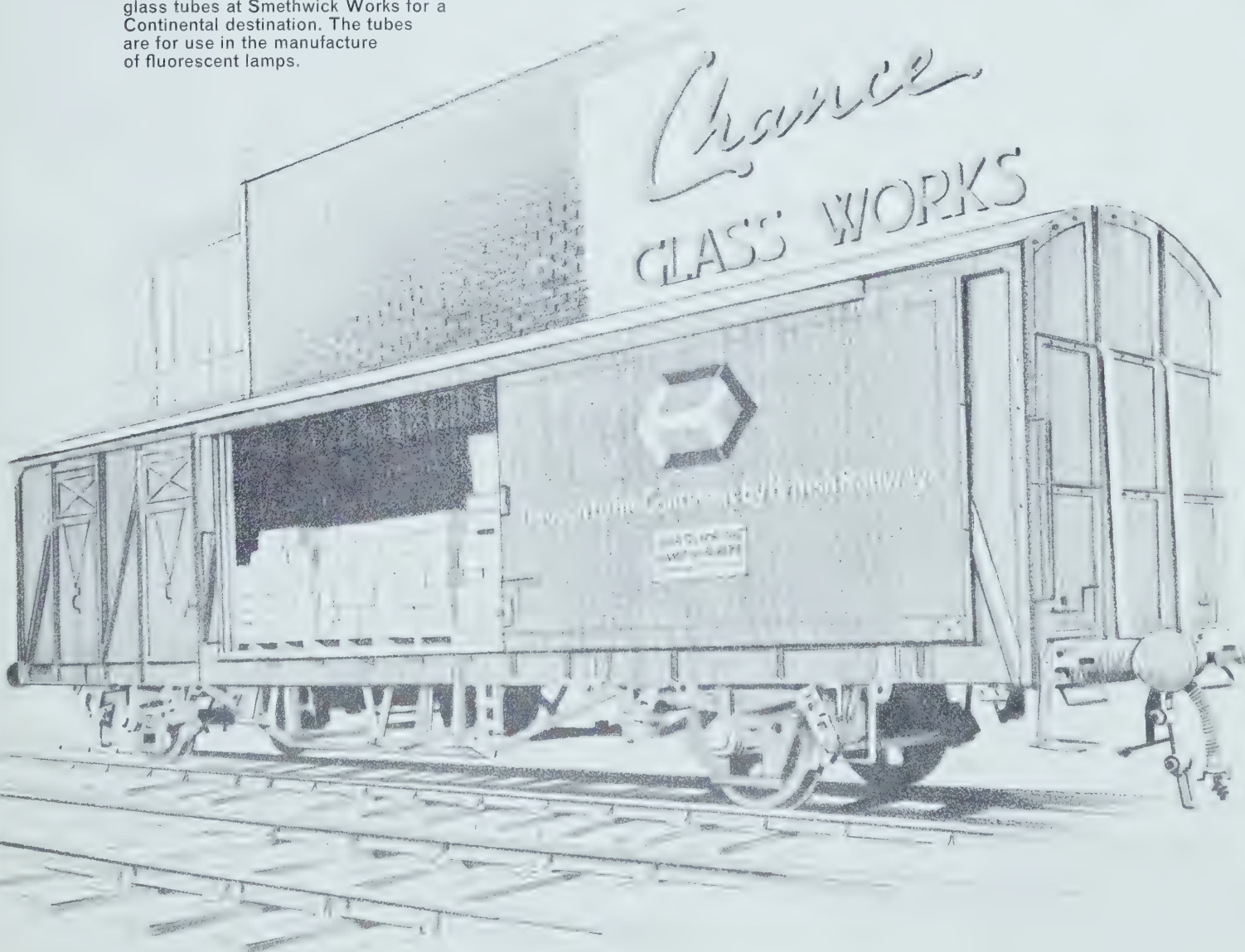
The second was the referring of the Firm, as far as Flat glass and Safety glass are concerned, to the Monopolies Commission for investigation. We believe our activities are in the public interest and no one has suggested that they are not, but we now have a long and time-consuming enquiry on our hands. This will not be completed till 1967. Meanwhile many of us will have to devote a large part of our time to this enquiry.

The third is the "early warning system" under which we may not raise our prices of Flat glass or Fibreglass without first giving one month's warning to the Government, who have the right to refer the proposed increase to the Prices and Incomes Board for adjudication.

All these three measures are of serious effect and can in some circumstances affect our freedom and our progress. In this field we ardently hope for no more surprises in 1966.

More generally then, a great deal of activity continues,

Ferry wagon loaded with soda lime glass tubes at Smethwick Works for a Continental destination. The tubes are for use in the manufacture of fluorescent lamps.





Training for management is an important feature of the education programme. Here members of a 1965 course are in session at the St. Helens Technical College.

and it is becoming more and more obvious that the most important of all things is to have enough of the right people to man each important position anywhere in the world with someone who has integrity, imagination, enterprise, and a capacity for hard loyal work to lead us. We have been well blessed with this in the past; now with the growing size of the Company we cannot have enough of such people. Increasing concentration on recruitment and training for these important posts is certain in the next few years. No part of our capital investment is more important or more productive than in the training and developing of people. This applies not only to management, but all the way down. This also has been recognized nationally, and the setting up of an Industrial Training Board covering a group of industries, including glass, is something that we welcome and we are glad to see that the Executive Officer of this Board has been taken from our own Firm in the person of our Group Education Officer. This Board has been set up by the Minister of Labour under the Industrial Training Act; the object of the Act is to ensure an adequate supply of properly trained people throughout industry and secure improvement in the quality and efficiency of industrial training. We come under the Ceramics,

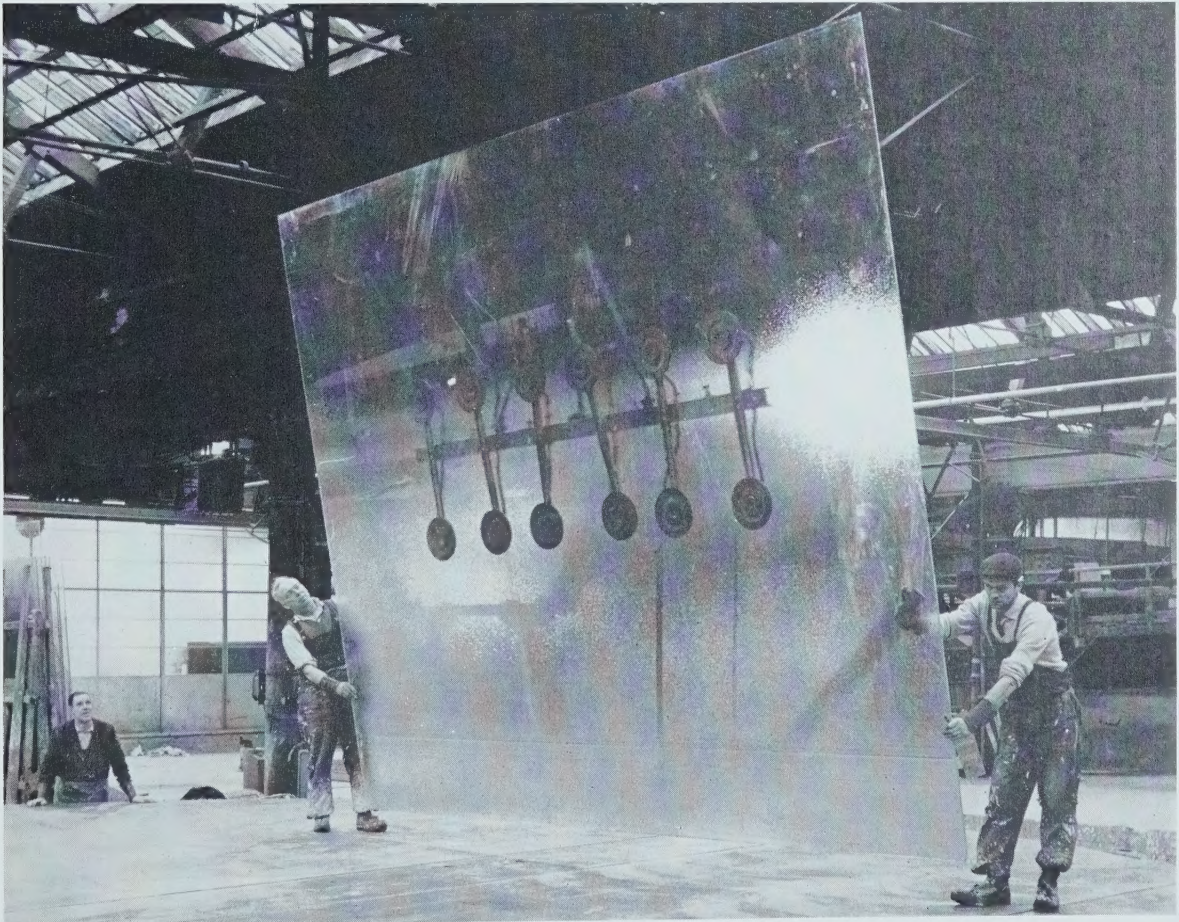
Glass and Mineral Products Board, and one of its duties will be to ensure that the cost of training is more evenly spread between firms within its jurisdiction by a financial levy on all companies of which the major part will be redistributed to those who are training their work people effectively. Education and training have always been matters of major importance in our Group and this Act is designed to bring all companies up to the level of the best. In addition more emphasis than ever before is being put by us on education and on training at every level within the Firm. This is costly but is certainly worthwhile for the Firm and for the individual.

I have far exceeded the space allotted to me. Two final comments—1966 is unusually clouded by uncertainties; if I must make a forecast I expect a fairly small increase—say 5% to 7½% in turnover, but with increasing competition and rising costs this will not increase profits—they can, however, certainly be increased by better performance throughout.

The last one is a thank you to all who have pulled their weight in 1965—and to those who in 1966 are going again to show the value of the traditional qualities of integrity, loyalty, hard work, and good fellowship.



In the face of fierce competition, Chance-Pilkington Optical Works at St. Asaph secured an order for a framed radiation shielding window for the Euratom Nuclear Research Laboratories in Mol, Belgium. Deceptively heavy for its size, the unit weighed just over five tons and consisted of four glass blocks, three 8" thick and one 4" thick.



On Friday, April 30, 1965 the mighty grinding and polishing machines at Cowley Hill Works finally came to a standstill. This day also marked the end of Plate glassmaking at St. Helens. Here is one of the last plates to come off the table,

